THE EFFECT OF PROVISION OF BURSARIES ON HUMAN CAPITAL DEVELOPMENT (HCD) IN SECONDARY SCHOOLS AND TERTIARY LEARNING INSTITUTIONS IN MURANG'A COUNTY, KENYA

[1*] **Wambati Simiyu Merit**
wambati@yahoo.com

[2**] **Dr. James Muya**
muyajn@kisiiuniversity.ac.ke

[1,2] School of Business and Economics, Kisii University, Kenya

Abstract

Constituency Development Fund (CDF) is a fund created by the Government which was enacted in the year 2003 and had a significant impact on the development projects at the community level by putting the constituency at the forefront of development activities in Kenya. The objective of the study was to establish the effect of provision of bursaries on Human Capital Development in secondary and tertiary learning institutions in Murang'a County. The study used a descriptive survey design. The study was guided by the stakeholders' theory and the theory of fiscal federalism. The target population comprised of 84 members of the Constituency Development Fund Committee (CDFC), 271 secondary school principals, 1 university vice chancellor and 3 college principals, 135,500 secondary school students and 50,000 college students totaling to 185,859 respondents. The study used stratified random and simple random sampling methods to arrive at a sample of 399 respondents consisting of 4 members of the Constituency Development Fund Committee (CDFC), 12 secondary school principals, 1 university vice chancellor, 1 college principal, 243 secondary school students and 138 college students. The study used questionnaires and key informant interviews as research instruments. Reliability of the study instrument was tested using Cronbach Alpha coefficient while validity was ascertained by consulting experts and supervisors. Descriptive statistics such as percentages, means and standard deviations and inferential statistics, that is, multiple regression and correlation were used to analyze data. Data was presented using charts, figures, tables. The study established that CDF has fostered access to learning materials within the schools, enhanced availability of health facilities within schools, availed medical staff such as nurses to schools and colleges. The study concluded that the provision of health facilities and services, provision of teaching and learning facilities as well as provision of bursaries positively affected human capital development in Murang'a County. However, the challenges facing CDF had a negative significant influence on human capital development, and therefore slowed development in the county. The study recommends that the CDF committees need to consider availing the bursary to the students in good time to enable them remain in class without disruptions. This is expected to ensure that students remain in class to cover the desired content which in turn increases their performances. In addition, the CDF committee, schools' committees and other stakeholders need to work together to avoid unnecessary conflicts that hinder the release and usage of the CDF funds in Murang'a County.

Keywords: Constituency Development Fund, Human Capital Development

INTRODUCTION

1.1 Background to the Study

Education is a type of human capital investment, which has the ability to ameliorate economic development by increasing the income level of the poor members of the community in a similar manner as physical investments like irrigation systems, transport networks, electricity and communication channels (Wilkins & Stephens, 2013). When governments invest in education, they are not only spending on consumption but they are giving its citizens their basic human rights and increasing their production capacity and growing the profits that can be accrued from investments in basic and physical infrastructure (Baxen, Nsubuga & Botha, 2014).

Every government in the world has a social contract with its citizens. It has the obligation to develop social and economic interventions to secure and guarantee the welfare of its citizens. The government is responsible for the development of social amenity infrastructure such as; transport systems, health facilities, clean and accessible water, and electricity. However, it is common to find that; the quality and access to these services is affected by governance, state policies and structure, and implementation strategies (Giddens, 2013).

In 2003, the Constituency Development Fund (CDF) was created through the CDF act of 2003, which was later amended in the year 2007. The aim of this parliamentary Act was to alleviate poverty and reduce inequality in Kenya through committing 2.5% of all the revenues collected by the government to dealing with social and economic needs of the local communities. The Constituency Development Fund Board (CDFB) oversees this fund. This fund forms part of the numerous devolved funds that have been created by the Government of Kenya to alleviate poverty and developmental inequalities in the country (CDFB, 2013).

This fund has been very successful owing to the way it has shifted the role of identifying, planning and implementing projects from specific government ministries to local communities, which has created a feeling of possession, openness and accountability. This fund has also created employment among the local communities since most Constituency Development Fund (CDF) tenders are awarded to local business people, artisans, and the project materials being acquired from local business people. Through this fund, the social infrastructure of many communities has been improved in Kenya; Constituency Development Fund (CDF) has improved the state of education in Kenya by expanding learning facilities and providing bursaries to needy pupils. The Constituency Development Fund (CDF) Act was enacted in 2013 thus replacing the Constituency Development Fund (CDF) Act of 2003 (CDF, 2013).

The establishment of CDF in Kenya was a major departure from the previous development approach, which involved filtering through various bureaucracies and government agencies before reaching the locals. With CDF, money goes directly to the constituency where citizens participate in planning; prioritization; and implementation of development programs. Despite these very appealing provisions, constituencies have posted varied performance: some have succeeded while others have failed. This revelation has raised concern as to whether the fund was managed and the utilized effectively to meet the intended objectives (Waswa, Kilalo, Mwasaru & Kennedy, 2014).

Human capital development represents both expenditure and investment. In all countries, education consumes a huge portion of the nation's resources from the private and public sectors. This expenditure is informed by the universal recognition of education as a type of human capital investment that has numerous economic benefits and makes a tremendous contribution to the wealth of a nation by adding to the productivity of its citizens (Alkutich, 2016). The acquisition of basic education is a basic human right of all citizens of a nation

and recognized that accessing education is also a human right. Further, access to education as an important development issue that is central to the development of human capital and in the alleviation of poverty (UNESCO (United Nations Educational, Scientific and Cultural Organization, 2007).

Development of human capital is critical to poverty alleviation and economic growth. Human capital development, from a macro-economic viewpoint, leads to the improvement of productivity, makes technological innovation possible, increases the sustainability of growth, and improves the return of capital, which increases poverty alleviation (Alkutich, 2016). Therefore, human capital is a critical factor of production throughout different areas of the economy. In a micro-economic level, getting an education improves the chances of one being employed and also increases their earning potential (Solga, 2008). Therefore, at a micro-economic level, human capital is that constituent of education that increases an individual's productivity and their earning potential while a being an important part of the production of a firm. Consequently, human capital is the capability and the efficacy of people in the transformation of capital and raw material into services and goods and the agreement that it is only through the education system that these skills can be learned (Lutz & Samir, 2011).

Human capital development involves the provision of developmental and learning, which make training possible. The purpose of developing the human resources of a company is to ensure the organization has quality staff that enables it to attain its goals, attain growth, and improve performance (Son, 2010). This can only be attained by making sure that all staffs have the requisite skills, knowledge and competence to do their jobs effectively, this performance is dependent on continued efforts to improve and develop the staff so that their growth and promotion potential is improved. Education involves developing the understanding and knowledge that is requisite for holistic human development as opposed to only skills and knowledge that pertain to a specific area; this is also an action that develops human capital (National Research Council, 2013).

Even though the definition of human capital is not in contention, how to measure it is difficult since it's nearly impossible to see skills and the designing of a metric to measure it across disparate individuals and countries is even harder. Therefore, it has been necessary to create other substitute measures of human capital like literacy rates (Asali, Cristobal-Campoamor & Shaked, 2016); school enrollment rates (Sagarik, 2014); schooling years and transition (Barro & Lee, 2013); completion rates, test scores (Hanushek & Woessmann, 2009). All these measures will be taken into consideration in the current research.

The convoluted system of issuing fees, bursaries and grants is not only confusing to both students and parents but it also ineffective, for instance in UK (Smith, 2015). Hackett and Proctor (2016) further adds that some 240 million in bursaries that should have gone to students from disadvantaged group was left unclaimed since students were simply not aware of what was available. In Malawi, the government bursary scheme does not sufficiently address students 'needs at the secondary school level as few Malawians and district level employees are aware of the program and the requirement of the bursary process. Bursary funding is extremely limited and varies by district (World Bank, 2010).

Currently, most of the countries in the developing world have committed themselves to the provision of universal first cycle education to all children of school going age (Lewin, 2014). Furthermore, he reports that there has been an increase in the primary school enrolment in these countries as there has been a continued quiet neglect of secondary education. Nonetheless, the World Bank (2007) contends that many countries in East Asia and Latin America have increased their commitment to the expansion and strengthening of their secondary schooling education systems, however, they still face numerous challenges. These challenges

include low school completion rates for students who come from low-income families. In these countries, access to private finances is a critical determinant of secondary school entrance, retention and completion. In Bolivia, direct education costs account for 22% of the per capita income of households and in China; it makes up 20-30%, which is unaffordable to many households (World Bank, 2007). Moreover, access to education increases the opportunities that communities have and it may cushion them against being trapped in perpetual cycles of poverty. Education enables communities to gain knowledge that enables them to utilize technologies, improve their healthcare and share entrepreneurial skills.

According to World Bank (2007), in order for to partially fulfill the millennium development goal of achieving universal primary education by the year 2015, primary schools that have poor completion rates will have to build classes, train teachers and increase the education quality. Moreover, the World Bank (2007) contends that barriers to accessing education such as lack of school fees and transport plus parental concerns over children safety will have to be removed. The Children's Act of 2001 and the sessional paper number 14 of 2012 emphasized the importance of universal access to educational.

According to Patrinos (2013), throughout the world, countries spend significantly on education, though this increase in schooling has not improved access to education for the poor in the community. Likoko, Mutsotso and Nasongo (2013) observe that, the massive increase in education expenditure worldwide has been caused by the increase in inflation and the fact that learning now requires sophisticated and expensive equipment. Son (2010) contends that, nearly half of the world's population survives on two dollars a day or less while a fifth survives on a dollar or less, these people can mostly be found in Africa, East Asia and South Asia. Income inequality and poverty can be alleviated through access to education (Dao, 2017).

Access to education by the poor in Kenya has been improved by the initiation of a scheme for needy students funded by the government (Republic of Kenya 2010). The secondary education bursary fund (SEBF) was introduced in 1993/94 fiscal year to act as a safety cushion for poor and needy students against the negative impacts of sharing the cost of education with the government (Orodho, Waweru, Ndichu & Nthinguri, 2013). Since its creation in 2003, SEBF was disbursed to public secondary schools directly in Kenya. The role of identifying needy students and allocating the funds to them was allocated to the principals of secondary schools and their boards of directors. However, this was changed in the year 2003 when the Constituency Bursary Committee (CBC) was charged with role of managing bursary funds in order to comply with the decentralization policy and with the CDF act of 2003 (Republic of Kenya, 2003: Republic of Kenya, 2005).

1.2 Statement of the Problem

Human capital development of the poor majority remains the main strategy of reducing poverty. Investment in the poor is fundamental in increasing the chances of the children of the poor escaping poverty through proper education services (Barro & Lee, 2013). CDF should give financial Aid to the students in school yet it is not achieving its intended objectives. According to reports by the Ministry of Special Programmes (2014), there is little significance of Constituency Development Fund projects at the constituency levels as most of the funds set aside for the activities are embezzled through collaboration between the CDF committees and the school principals.

A study by Likoko, Mutsotso and Nasongo (2013) on the utilization of CDF funds by secondary schools in Kenya indicated the misappropriation of the school fund and CDF allocation for schools where only children of the rich and relatives of the authorities benefited from the fund. Further, the study found out that no school in Kenya had managed to use CDF fund in the provision of technical, learning infrastructure such as laboratory

equipment has, and classes in spite of its existence for two years since 2003 by then. With the introduction of CDF in the year, 2003, it was expected that every constituency would set aside a considerable amount of money from the CDF kitty to finance education in the respective public schools hence improve the enrollment and standards. The funds were expected to be used to provide bursaries to students from needy backgrounds that would otherwise not access education. In addition, physical facilities like science laboratories, classrooms and libraries needed to be constructed and equipped to ensure high enrollment (Bold, Kimenyi, Mwabu, & Sandefur, 2016).

Likoko, Mutsotso and Nasongo (2013) recommended that provision of bursaries, learning materials and health services with follow-ups could help improve the functionality of CDF. The researcher intends to reinforce these mitigating factors in this study. With this in mind, there has not been a study undertaken in Murang'a County to determine how constituency development fund has affected human capital development in secondary and tertiary learning institutions.

It is on this basis of functionality of the CDF that the researcher intended to assess the role that has been played by the CDF on human capital development after 13 years of existence in Murang'a County. The research is expected to give an insight to the policy makers in Kenya on whether there should be continued programmes of CDF with major focus to schools or the CDF has been diverted to other issues that are fully devolved in the current dispensation of the constitution and then give a way forward based on the findings since the argument of the lawmakers at the time of CDF bill was to set aside some funds that could be used in educational development as claimed by most of them at the time of enactment of the CDF law.

1.3 Objective of the Study

The objective of the study was to establish the effect of provision of bursaries on Human Capital Development (HCD) in secondary schools and tertiary learning institutions in Murang'a County.

1.4 Research Hypotheses

Ho_1: Provision of bursaries does not significantly affect Human Capital Development (HCD) in secondary schools and tertiary learning institutions in Murang'a County.

1.5 Scope of the Study

The study was carried out in the following constituencies in Murang'a County: Kangema, Kiharu, Gatanga, Mathoya, Kigumo, Maragwa and Kandara. The study examined how the provision of bursaries, teaching and learning infrastructure and health facilities has affected human capital development and to establish the challenges facing the utilization of CDF in Murang'a County.

1.6 Justification of the Study

This study provides additional theoretical foundation and increases understanding by clearly expressing how constituency development fund has affected human capital development in secondary and tertiary learning institutions. The study will be significant to the managers of CDF at constituency levels to understand the need for making follow ups, to make digital records and understanding where there have been shortcomings and therefore seek improvements. To the policy makers and the government, the study will be of significance in suggesting areas that policies can be improved and therefore policy makers can devise strategies to derive policies as far as CDF is concerned. To the greater Murang'a County CDF officials, the official will be more equipped on how to improve CDF in ensuring maximum results. This study will also provide scholars with the

role of constituency development fund on Human capital development. Additional research areas will also be suggested for future studies.

LITERATURE REVIEW

2.1 Theoretical Review

The study was guided by the stakeholders and Fiscal Federalism theories that are reviewed in the following section.

2.1.1 Stakeholders Theory

The creation of transparency and accountability in the public services sector is extremely complex. This complexity is occasioned by the fact that there is a complicated web of individuals such as service providers and policy makers that are responsible for accountability. Additionally, the achievement of accountability is complicated by the fact that it is difficult to define and to measure financial outcomes. Previous research shows that more than two thirds of failure to achieve accountability is because of wanton neglect and lack of commitment to accountability (Ladd, 1996). He contends that the present approach that aims at comprehending the working environment does not take into account the groups of people who are affected by or who can affect the corporation or its stakeholders. Moreover, he contends that effective management of the current business environment that is turbulent and dynamic can be addressed by the stakeholder theory; this theory gives a mechanism for addressing the dynamic demands of the various groups of stakeholders that have differing levels of stakes in an organization (Jensen & Meckling, 1996).

The main contention of the stakeholder theory is that the success of an organization when it tries to attain transparency and accountability depends on how well the organization manages the relationship that it has with all of its stakeholders. This theory therefore shows that the common viewpoint of the maximization of the wealth of the stakeholders is not enough since schools comprise of different implicit and explicit contracts with different entities. Additionally, stakeholder's theory makes the assumption that organizations are capable of influencing not only societies but their different stakeholders. During the development of the stakeholders' theory, Freeman incorporated the concept of stakeholders into the policy and planning model plus the corporate social responsibility model of managing stakeholders (Jensen & Meckling, 1996).

The analysis of stakeholders focuses on the development and evaluation of how the strategic decisions of the organization are approved by the stakeholders that support the organization (Ladd, 1996). In this study, the stakeholders include the Government of Kenya, CDFB, board Committees, targeted groups and the public. While these groups are not adversaries of each other, their disparate behaviors can hamper the development of strategies by school management that are a match for the available resources. Hence, this theory is of importance in guiding how interactions between stakeholders can affect the role of CDF on human capital development.

2.1.2 Theory of Fiscal Federalism

The conventional theory of fiscal federalism provides a mechanism that allows for the allocation of functions to numerous layers of the government and the correct fiscal instruments for doing the functions that have been assigned to them (Oates, 1972). Wallace Oates' Decentralization Theorem gives the theoretical rationale for transfer of responsibility of the provision of communal merchandises and amenities from the central government to the resident cadre. The theorem stipulates that it is additionally effective for the local community

to give effective outputs at their specific districts than for the central government to give specific and similar levels of development across all districts (Oates, 1972). Therefore, since the provision of public goods has no economies of scale as their benefits accrue to populations that are in different geographic locations, the welfare of a country is therefore almost similar to the welfare that can be provided by the central government.

The fiscal federalism theories define how best to provide public goods and services and how best to finance such goods and services in a manner that ensures the maximization of the welfare of the community and is characterized by the average voter theorem. Decentralization is more receptive to the needs of the local communities, which enable the targeting of the provision of public goods while centralization leads to similar provision of public goods in all jurisdictions. Decentralization is capable of being an effective method of alleviating poverty in societies and communities since the local communities are incentivized and knowledgeable in the designing and implementation of policies that are responsive to the needs and preferences of the local communities (Litvack et al, 1998, and World Bank, 2001). It leads to bottom up poverty reduction through broader participation of citizens as well as funding projects that fit their tastes and preferences (Turner and Hume, 1997).

Fiscal federalism theories stipulate that multiple layers of government are responsible for the expenditure and assignment of local revenues. National public goods should therefore be financed at the national level while the indigenous public properties should be funded at the indigenous level. Musgrave (1983) suggested that taxes and charges to users should be used to pay for the expenditure of the local public; these include property taxes while income taxes and consumption taxes should fund the central government. This subdivision of collected revenues mostly leads to improved responsibility in expenditure that is financed locally which justifies another characteristic of federal fiscalism of the issuance of inter-governmental grants in order to fill the revenue gap.

This theory gives insight on the part that fiscal transfer or grants play and the problems that come with it. Existing theoretical literature posits that the role of intergovernmental fund transfers and grants is to reimburse local governments for benefits spillovers to attain optimal provision of the public goods or services (Bird et al., 1995). The theories of fiscal federalism perceive that a federal system of government and of planning the public sector in a way that gives space for de facto making of decisions by local authorities regardless of the national government's constitution (Oates, 1999). In a normative point of view, this theory classifies public sector roles; allocation of resources, redistribution of income and stabilization of the macro economy in the face of failures in the market (Oates, 1999).

Another theory of fiscal federalism is based on Tiebout's Model (Brueckner, 2000). In the model, highly mobile households, residents choose locations in jurisdictions that give them a fiscal package that is most suitable to their preferences. These households choose their tastes. The households select their preferred supply of public goods by selecting amongst competing local jurisdictions and discretionally moving to that community that most satisfies their set of preferences. Individual households would be sort into taste homogenous jurisdictions where individuals vote with their feet and locate in the community that offers the bundle of public services and taxes they like best (Oates, 1999). Individuals will therefore satisfy their demand for public services by the appropriate selection of a community in which to live and pay taxes for the services. In equilibrium, people will distribute themselves across communities on the basis of their demands for public services where each individual receives desired level of public services and cannot be made better off by moving elsewhere.

Tiebout (2005) presented a model of local government expenditure that tries to determine the optimal level of public goods through a mechanism of preference revelation of the households. The Tiebout model therefore represents the preferences of the population more adequately than national level models and was said to be a model where people vote with their feet. The model works under the following assumptions: that Government activities generate no externalities, that individuals are completely mobile and that each person can travel without cost to a jurisdiction whose public services are best. The model also assumes that people have perfect information with respect to each community's public services and taxes, that there are enough different communities with public services for individual's choice, that public services are financed by a proportional property tax and communities can enact exclusionary zoning laws.

The theory of fiscal federalism will be applied in the study to determine whether there is income distribution and redistribution functions and resource allocation functions assigned to the required stakeholders. As noted by Ebel and Yilmaz (2002), the main benefit associated with a fiscal structure is economic efficiency, which rests on two assumptions. First, it assumes that a group of individuals who reside in a community or region possess tastes and preference patterns that are homogenous and that these tastes and preferences differ from those of individuals who live in other communities or regions. Second, it assumes that individuals within a region have a better knowledge of the costs and benefits of public services of their region. This is aimed to be uncovered in the present study.

2.2 Empirical Review

2.2.1 Provision of Bursaries and Human Capital Development

Hillman (2015) did a study that examined the influence of governmental and non-governmental financial aid the retention rates of Hispanic High School children and established that these two factors had a significant influence on retention rates. The study also established that Hispanic students dropped out of school because of financial constrains as opposed to academic reasons. Further, the study established that those Hispanic students, who earned more credits, had more semesters enrolled and had received more credits were those who received a lot of governmental or non-governmental financial aid.

Various studies indicate that in spite of the large sums of money allocated for bursary scheme only a small percentage is actually disbursed to the beneficiaries. Ziderman (2013) found that in China and the Philippians', bursaries eligibility is based on the countries' official poverty level. Nevertheless, eligibility ceiling is pegged on income levels as opposed to the official poverty line, which gave suitability to numerous pupils who are, not drown from the rank of the extremely poor. Suitability based on family income as used in Thailand does not take into consideration some factors like as the amount of other dependents in a given household (Ziderman, 2013).

Oyaro (2008) observed that Uganda's subsidized secondary Education programme forms part of the country's strategy to alleviate poverty. Oyaro (2008) further asserted that UPE has increased the level of the knowledge and skills being offered by primary schools to enable its citizens to acquire superior, intellectual, manual and technical abilities in order to be able to handle complex production and have a wider understanding of the Ugandan economy. UNESCO (2007) concurred that universal primary education is not useful if the learners cannot proceed to secondary level or other post-primary training institution. It adds that young people feel cheated when they excel in national examinations, but find themselves unable to proceed to secondary education because of inability to pay. It would be useful for any government to provide subsidized education at secondary level because it affords the poor an opportunity to move up on the academic ladder.

Obiero (2014) sought to explore how effective CDF funded bursary schemes were on the participation rates in public secondary schools in Rachuonyo North district, Kenya. This study was grounded on the human capital theory and used a descriptive survey method, which was aimed at 48 secondary school principals, 840 secondary school children and 15 members of CDF bursary committees. This study established that the majority of students who had made applications to be given bursaries were not successful. The study also established that CDF funds are normally released in the months of July and June and that many students learned about the CDF bursaries from their principals. The months when the bursary is released are not in tandem with the schooling calendar, which has a detrimental effect on the ability of the fund's beneficiaries to participate in public secondary schooling. Further, the study also established that there is no official guideline from the ministry of finance on the allocation of CDF bursary funds. The members of the CDF committee reported that educational bursary funds are sub divided equally among all the wards in the constituency. In turn, every ward appoints a committee, which is charged with the identification of needy students and the allocation of funds to them. This study recommended that the government increases their sensitization of the public on the existence of the CDF fund and that there is equitable and transparent allocation of the funds to students who have a genuine need for the money. The study also recommends that there should be clear guidelines on how the fund should be disbursed to needy students so as to avoid confusion during the identification of needy students and that there should be harmonization of the bursaries available so as to avoid the duplication of roles and resources.

Macharia (2009) investigated the influence of the bursary scheme funded by CDF on the public secondary school retention rates in Naivasha, Kenya. This study established that the majority of students who had made applications to be given bursaries were not successful. Additionally, the study also established that CDF funds are normally released in the months of July and June; the months when the bursary is released are not in tandem with the schooling calendar which has a detrimental effect on the ability of the fund's beneficiaries to participate in public secondary schooling. Further, the study revealed that students learn about the fund from their teachers and principals and that there was poor dissemination of information regarding the bursary, which denied students access to the bursary thus reducing retention and enrollment, rates.

Musee (2013) analyzed the factors that influence the allocation of academic bursaries to pupils in public secondary schools in Central division, Machakos District. This study was inclined to the Human Capital Theory. Descriptive research design was adopted by the study. The findings of this study were: there is a substantial correlation between family characteristics and bursary allocation. Children from the poor families were considered for bursary allocation more than those from rich families. In addition, there was a substantial correlation between gender and bursary allocation.

Onkoba (2012) assessed the influence of bursary on internal efficiency in secondary schools. This study used descriptive design and location of the study was Gucha District. The study found out that the role of administration was minimal and insignificant in selection of the needy, the number of applicants are usually more and hence not adequate and even those awarded cannot meet their financial needs. The management of bursary by constituency committee is overridden with a number of negative influences such as nepotism and political inclination that makes them to be considered as fair, the existing bursary committee entrusted with management of this kitty has weakness affecting the performance of its duty more so identification, award and disbursement of the bursary which is always delayed.

A study by Odebero (2007) on fairness in the allocation of bursary to secondary school pupils in Busia District found that bursary recipients got less than a half of the bursary they were supposed to receive leading to low

participation rate. Studies done on this subject have focused on the uptake of CDF bursary and the challenges facing it but not on the effect of CDF on the development of human capital, this is the gap that this study sought to fill.

MATERIALS AND METHODS

3.1 Research *Design*

The research adopted a descriptive survey design in which the associations between variables were established. This resulted in the data gathered being described using tables, charts, pictures or words; this also showed the statistical relationship between variables (Mugenda and Mugenda, 2003). This method described the study variables in a bid to provide answers to research questions posed by the study. A descriptive design is a method of data collection that makes it possible to answer questions regarding to the present state of the respondents under study. Descriptive research design was utilized in this study as it permitted the respondents to study a phenomenon within its present state. This design made it possible for the researcher to avoid bias thus increasing the validity of the results of the research.

3.2 Study Area

The study was carried out in Murang'a County, Kenya. The county has a total population of 942,581 people according to the 1999 census. It is divided into 7 constituencies namely, Gatanga, Kangema, Kiharu, Mathioya, Kigumo, Kandara and Maragwa. The County is home to Murang'a University. There are 3 colleges in Murang'a County namely: Murang'a Teachers College, Kenya Medical Training College (KMTC) and Murang'a Technical Institute. The county has 271 secondary schools both public and private and 739 primary schools.

3.3 Target Population

The target population in the study comprised of 3 principals of the colleges (Murang'a Teachers College, Kenya Medical Training College (KMTC) and Murang'a Technical Institute) and 1 university chancellor (Murang'a University) in the County, 271 principals of public and private secondary schools, 84 members Constituency Development Fund Committee (CDFC) in 7 constituencies, 135,522 Secondary school students and 50,078 college students and university students were selected and given a chance to participate in the study as they are the primary recipients of CDF bursaries to schools. Principals were selected to provide information on students' participation in secondary school and college education and its linkage to the CDF bursary. CDF committee members were selected to provide information regarding the number of the bursary applicants, timeliness of the bursary, how needy students are identified and adequacy of the financial resources available to the CDF bursary committee.

Table 3.1 Target Population

	Description	Total	Population
1	CDF Members	7 constituencies with 12 members each	84
2	Principals	271 schools with 1 Principal per school	271
3	Secondary Students	271 schools with 500 students per school	135,522
4	University and College students	1 university with 20,000 students and 3 colleges with 10,000 students	50,078
5	University Vice Chancellors and College Principals	1 university chancellor and 3 college principals	4
	Totals		185,959

Source: CDF Bursary Committee, Murang'a (2016).

3.4 Sampling Techniques and Sample Size

The sampling method to be used for the study was that of stratified random sampling method where the researcher categorised the respondents according to the classes such as forms one to three that were expected to participate in the study. The form four students were left out in the study based on their schedule as candidates. For the university and colleges, second year students participated in the study since they were in a position to describe the bursary application processes and how it had contributed to their retention in school. Secondary school principals from the most populous schools in the 7 constituencies also participated in the study plus the Vice Chancellor of the university and the principals of the colleges. The study then considered every 3 members of the CDF committee in the 7 constituencies to participate in the study at random based on their availability with all the head teachers in a school being given a chance to participate in the study. This study used sampling procedure for the population (185,859 respondents) based on the Yamane (1967) formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n is the sample size

N is the population size, and

e is the level of precision

Assuming the following:

95% confidence level and

P = 0.05

The determined sample size (n) for the respondents will be derived as follows:

$$= \frac{185,859}{1 + 185,859(0.05)^2}$$

The sample for the study was therefore 399. Sampling in each stratum was as shown in Table 3.2.

Table 3.2 Sample Size Determination

	Description	Population	Sample
1	CDF Members	84	4
2	Principals	271	12
3	Secondary Students	135,522	243
4	University and College students	50,078	138
5	University Chancellors and college principals	4	2
	Totals	**185,959**	**399**

Source: CDF Bursary Committee, Murang'a (2016).

3.5 Instrumentation

3.5.1 Questionnaire

The research instruments that were used in the study were questionnaires that were structured according to the study objectives with both open and closed questions and key informant interviews. The questionnaires had the first part as demographic information describing the characteristics of the respondents such as age and education level after which the subsequent section described the objectives of the study in each subsequent section. The questionnaires were selected for the study based on the type of the data to be collected and the large size of sample size that makes questionnaires the only appropriate tool for the study. Questionnaires were also chosen owing to their precision in data collection following its structuring according to the study objective.

3.6 Validity and Reliability Tests

Before the instruments can be used for actual data collection, it was necessary to confirm their validity and reliability.

3.6.1 Validity Tests

Validity denotes to the degree to which a measure what it is intended to measure while reliability describes the possibilities of repeating the questionnaires with the same outcome (Mugenda & Mugenda, 2003). Validity in the study was ensured by giving the data collection instruments to the experts in the study and their recommendations taken into consideration. Further, the comments from the supervisors were included in the final data collection tool.

3.6.2 Reliability Tests

The reliability and internal consistency were measured with the help of Cronbach Alpha. Internal consistency is a measure of the relationship between different variables in the same study. According to Castillo (2009), a score of less than 0.9 means that the consistency is excellent, that of less than 0.8 means that it is good, less than 0.7 means acceptable less than 0.6 means questionable, less than 0.5 and below is described as poor. This study found that all constructs had a Cronbach Alpha coefficient of more than 0.7, and the Cronbach coefficient of 0.854 was obtained. The reliability findings are shown in Table 3.3.

Table 3.3 Reliability Statistics

	Cronbach's Alpha	N of Items
Provision of bursaries	.854	10

Source: Field Data (2018)

3.7 Data Analysis and Presentation

The study used descriptive statistics such as: percentages, frequency of response, means and standard deviations and the inferential statistics that were utilized were Simple regression and correlation analysis to test the association between the study variables. The analyzed data was presented using charts, figures, tables and other info graphics. The Simple regression was of the form;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where **Y** is the Human Capital Development, **β0** is the regression coefficient; **β1** is the slopes of the regression equation, **X₁** is the provision of bursaries, while **ε** is the error term

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Response Rate

The study sought to collect data from 4 CDF members, 12 principals, 243 secondary students, 138 university and college students and 2 university chancellors and college principals in Murang'a County. However, there were non-response incidents encountered during data collection and therefore 100% response was not achieved. Consequently, out of the targeted 399 respondents, 329 gave positive response to the study while 70 did not return their questionnaires. In addition, out of the 4 CDF members 3 gave positive response, of the 12 principals 9 returned the questionnaires, out of the 243 secondary students 202 gave positive response, of the 138 university and college students 114 gave positive response and 1 university Vice chancellor and college principal returned the questionnaires. The study therefore achieved an overall response rate of 82% and a non-response rate of 18% as presented in Table 4.1. This response was excellent as per Mugenda and Mugenda (2003) who recommend a response rate of more than 70%, and therefore considered sufficient for analysis. All the 329 returned questionnaires were usable in the study.

Table 4.1 Response Rate

	Distributed	Returned	Response Rate
CDF Members	4	3	75%
Principals	12	9	75%
Secondary Students	243	202	83%
University and College students	138	114	83%
University Chancellors and college principals	2	1	50%
Total	399	329	82%

Source: Field Data (2018)

4.2 Descriptive Analysis

4.2.1 Provision of Bursaries

The first objective of the study was to establish the effect of provision of bursaries on Human Capital Development (HCD) in secondary and tertiary learning institutions in Murang'a County. The study used descriptive statistics to present findings on provision of bursaries in the county. The study found that most respondents (37.4%) strongly disagreed that the CDFC avails bursary funds to students within appropriate time to avoid disruption of class work, 22.5% neither agreed nor disagreed while 21% disagreed. The study also found that 50.8% of the respondents strongly disagreed that the CDF funds have been able to increase enrolment rates within schools while 17.4% disagreed. Most respondents (38%) strongly disagreed that the CDF funds have fostered the ability of students to successfully finish up their school programs, 17.3% disagreed while 14.6% neither agreed nor disagreed.

In addition, most respondents (26.1%) strongly disagreed that the CDF funds have helped enhance performance of students due to ample time in school; most respondents neither agreed nor disagreed that the CDF funds have fostered the transition rates within secondary schools (39.1%) while 54.7% strongly disagreed that CDF funds have fostered transition rates from secondary schools to colleges and universities. It was also found that

43.3% of the respondents strongly agreed that through the CDF funding education has been subsidized within the community thus fostering formal education engagement levels, 31.7% agreed that the CDF funding as fostered education quality through availing of bursaries, 44.1% agreed that CDF bursary funds are provided to needy students only, while 34% neither agreed nor disagreed that CDF funds are sufficient for needy students to pay their entire secondary school or college fees.

From the means obtained, it was determined that the respondents disagreed that the CDFC avails bursary funds to students within appropriate time to avoid disruption of class work ($M = 2.29$, $SD = 1.243$); the CDF funds have been able to increase enrolment rates within schools ($M = 2.25$, $SD = 1.587$); the CDF funds have fostered the ability of students to successfully finish up their school programs ($M = 2.51$, $SD = 1.484$); the CDF funds have helped enhance performance of students due to ample time in school ($M = 2.73$, $SD = 1.351$) and that CDF funds have fostered transition rates from secondary schools to colleges and universities ($M = 2.33$, $SD = 1.585$).

The respondents however agreed that the CDF funds have fostered the transition rates within secondary schools ($M = 3.72$, $SD = 1.045$); through the CDF funding education has been subsidized within the community thus fostering formal education engagement levels ($M = 3.36$, $SD = 1.555$); the CDF funding as fostered education quality through availing of bursaries ($M = 3.66$, $SD = 1.189$); CDF bursary funds are provided to needy students only ($M = 3.54$, $SD = 1.202$) and that CDF funds are sufficient for needy students to pay their entire secondary school or college fees ($M = 3.55$, $SD = 1.066$). All the standard deviations were greater than 1 showing that the respondents had varied opinions about provision of bursaries in Murang'a County. The findings are shown in Table 4.2.

Table 4.2 Provision of Bursaries

		SD	D	M	A	SA	Mean	S. D
The CDFC avails bursary funds to students within appropriate time to avoid disruption of classwork.	F	123	69	74	46	17	2.29	1.243
	%	37.4%	21.0%	22.5%	14.0%	5.2%		
The CDF funds have been able to increase enrollment rates within schools.	F	166	57	32	1	71	2.25	1.587
	%	50.8%	17.4%	9.8%	0.3%	21.7%		
The CDF funds have fostered the ability of students to successfully finish up their school programs.	F	125	57	48	51	48	2.51	1.484
	%	38.0%	17.3%	14.6%	15.5%	14.6%		
The CDF funds have helped enhance performance of students due to ample time in school.	F	86	65	61	85	32	2.73	1.351
	%	26.1%	19.8%	18.5%	25.8%	9.7%		
The CDF funds have fostered the transition rates within secondary schools.	F	0	36	128	54	109	3.72	1.045
	%	0.0%	11.0%	39.1%	16.5%	33.3%		
CDF funds have fostered transition rates from secondary schools to colleges and universities	F	180	23	0	91	35	2.33	1.585
	%	54.7%	7.0%	0.0%	27.7%	10.6%		
Through the CDF funding education has been subsidized within the community thus fostering formal education engagement levels.	F	47	70	63	2	139	3.36	1.555
	%	14.6%	21.8%	19.6%	0.6%	43.3%		
	F	26	23	82	104	93	3.66	1.189

The CDF funding as fostered education quality through availing of bursaries.	%	7.9%	7.0%	25.0%	31.7%	28.4%		
CDF bursary funds are provided to needy students only	F	35	26	58	145	65	3.54	1.202
	%	10.6%	7.9%	17.6%	44.1%	19.8%		
CDF funds are sufficient for needy students to pay their entire fees	F	18	23	109	106	65	3.55	1.066
	%	5.6%	7.2%	34.0%	33.0%	20.2%		

Source: Field Data (2018)

The findings of the study agree with the findings of the Government of Kenya (2007) the through CDF, more schools have been constructed and equipped, which has aided the government in the implementation of its free primary education and subsidized secondary education. In addition, it was found that CDF fund has led to the increase in the quality of education being offered by schools and in the implementation of free primary education at the constituency level. In addition, Ziderman (2013) agrees with the study findings when the study found that bursaries eligibility is pegged on income levels as opposed to the official poverty line, which gave suitability to numerous pupils who are, not drown from the rank of the extremely poor.

Macharia (2009) in line with the findings of this study also established that the majority of students who had made applications to be given bursaries were not successful. Additionally, the study also established that CDF funds are normally released in the months of July and June; the months when the bursary is released are not in tandem with the schooling calendar which has a detrimental effect on the ability of the fund's beneficiaries to participate in public secondary schooling. Onkoba (2012) also found out that the role of administration was minimal and insignificant in selection of the needy, the number of applicants are usually more and hence not adequate and even those awarded cannot meet their financial needs.

4.2.2 Regression Analysis

Regression analysis was done between provision of bursaries with human capital development. As illustrated in the Table 4.3, the predictor variable (provision of bursaries) explains 68% of the variation in human capital development in Murang'a County. This is as given by the R square coefficient with a value of 0.680.

Table 4.3 Model Summary for Provision of Bursaries

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825[a]	.680	.679	.725

a. Predictors: (Constant), Provision of bursaries

Source: Field Data (2018)

As illustrated in the Table 4.3, the significance value in testing the reliability of the model for the relationship between provision of bursaries and human capital development was obtained as 0.000 which is less than 0.05 the critical value at 95% significance level. Therefore, the model is statistically significant in predicting the relationship between provision of bursaries and human capital development. The F value from the table is 696.032 indicating a significant model for the relationship as given by the regression coefficients.

Table 4.4 ANOVA Table on Provision of Bursaries

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	365.542	1	365.542	696.032	.000[b]
1	Residual	171.734	327	.525		
	Total	537.277	328			

a. Dependent Variable: Human capital development
b. Predictors: (Constant), Provision of bursaries

Source: Field Data (2018)

The findings shown in Table 4.4 indicate that provision of bursaries had positive and significant influence on human capital development. According to the results, provision of bursaries had a significant influence on human capital development as shown by the coefficients ($\beta = .825$, $t = 26.382$, $p = 0.000$). These findings are in line with the findings of Ziderman (2013) who found a positive relationship between provision of bursaries and human capital development.

Table 4.5 Regression Coefficients on Provision of Bursaries

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.716	.127		5.644	.000
	Provision of bursaries	.877	.033	.825	26.382	.000

a. Dependent Variable: Human capital development

Source: Field Data (2018)

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Findings

Based on the objective of the study, it was found, that the CDFC did not avail bursary funds to students within appropriate time to avoid disruption of class work, the CDF funds had not been able to increase enrolment rates within schools, the CDF funds had not fostered the ability of students to successfully finish up their school programs, the CDF funds had not helped enhance performance of students and that CDF funds had not fostered transition rates from secondary schools to colleges and universities. However, CDF funds had fostered the transition rates within secondary schools, through the CDF funding education has been subsidized within the community thus fostering formal education engagement levels, the CDF funding had fostered education quality through availing of bursaries and that CDF funds were sufficient for needy students to pay their entire secondary school or college fees. The study also found that provision of bursaries and human capital development were strongly correlated.

5.2 Conclusions

From the study it was concluded that the CDF committee did not avail bursary funds to students within appropriate time which affected their ability to remain in class and concentrate, and therefore the ability of students to successfully finish up their school programs and attain enhanced performance was hindered.

5.3 Recommendations for Policy and Practice

Base on the findings and conclusions of the study, the following recommendation was made in the study. The study found that the CDF committees did not avail the bursary to students in good time. The study therefore recommends that the CDF committees need to consider availing the bursary to the students in good time to enable them remain in class without disruptions. This is expected to ensure that students remain in class to cover the desired content which in turn increases their performances. The committee can also timely releasing of funds which can help students to successfully transition from secondary schools to tertiary institutions within stipulated time.

5.4 Recommendation for Further Research

This study was only conducted in the Murang'a county. This limited the study to the coverage. The study also measured the viewpoints of CDF members, principals, secondary students, university and college students and University Chancellors and college principals only; therefore, the views of other parties such as teachers, parents and school finance departments were not considered. The researcher therefore recommends that other studies be conducted on the same subject area in other counties, and marginalized areas for comparative results. The views of other parties can also be considered in future studies.

REFERENCES

Alkutich, M. (2016). *Examining the Impact of School Inspection on Teaching and Learning. Dubai Private Schools as a Case Study.*

Asali, M., Cristobal-Campoamor, A., & Shaked, A. (2016). *Local human capital formation and optimal FDI. The Journal of International Trade & Economic Development, 25(5), 691-705.*

Barro, R. J. (1991). *A cross-country study of growth, saving, and government. In National saving and economic performance. University of Chicago Press, 271-304.*

Barro, R. J., & Lee, J. W. (2013). *A new data set of educational attainment in the world, 1950–2010. Journal of development economics, 104, 184-198.*

Baxen, J., Nsubuga, Y., & Botha, L. J. (2014). *A capabilities perspective on education quality: Implications for foundation phase teacher education programme design. Perspectives in Education, 32(4), 93-105.*

Bold, T., Kimenyi, M., Mwabu, G., & Sandefur, J. (2016). *Why did abolishing fees not increase public school enrollment in Kenya? Center for Global Development Working Paper, (271).*

Brueckner, J. K. (2000). *Fiscal decentralization in developing countries: The effects of local corruption and tax evasion. Annals of Economics and Finance, 1(1), 1-18.*

CDFB. (2013). *Constituency development fund board press statement. Constituency development fund board.*

Dai, D. Y., Swanson, J. A., & Cheng, H. (2011). *State of research on giftedness and gifted education: A survey of empirical studies published during 1998—2010 (April). Gifted Child Quarterly, 55(2), 126-138.*

Dao, M. Q. (2017). *Determinants of the Relative Importance of Education in Low-Income and Lower-Middle Income Countries. Economia Internazionale/International Economics, 70(2), 153-164.*

Giddens, A. (2013). *The third way: The renewal of social democracy. John Wiley & Sons.*

Government of Uganda. (2010). Appraisal report: Updated Education Sector Strategic plan, 2010-2015. Kampala: Gorvenment printer.

Hackett, M., & Proctor, M. (2016). Three-dimensional display technologies for anatomical education: a literature Review. Journal of Science Education and Technology, 25(4), 641-654.

Hanushek, E. A., & Woessmann, L. (2009). Schooling, cognitive skills, and the Latin American growth puzzle (No. w15066). National Bureau of Economic Research.

Hillman, S. K. (2015). The relationship between English Language Education Policies and economic growth in Asia (Doctoral dissertation, University of Hawai'i at Manoa).

Jensen, M., & Meckling, W. H. (1996). Theory of the Firm: Managerial behaviour, agency costs and ownerships structure. Journal of financial economics, 3, 305-360.

Ladd, J. (1996). The empowerment process: Integrating theory and practice. Academy of management review, 13, 471-482.

Lewin, D. (2014). Behold: Silence and attention in education. Journal of Philosophy of Education, 48(3), 355-369.

Likoko, S., Mutsotso, S., & Nasongo, J. (2013). The Adequacy of Instructional Materials and Physical Facilities and their Effects on Quality of Teacher Preparation in Emerging Private Primary Teacher Training Colleges in Bungoma County, Kenya. International Journal of Science and Research (IJSR), India Online ISSN: 2319, 7064.

Lutz, W., & Samir, K. C. (2011). Global human capital: Integrating education and population. . Science, 333(6042), 587-592.

Macharia, D. N. (2009). Effect of constituency development fund bursary scheme on retention rates in public secondary schools in Naivasha Division, Naivasha district, Kenya.

Mugenda O. M. ; Mugenda A.G. (2003). Research; methods. Nairobi: Acts Press.

Musee, M. M. (2013). Factors Influencing Allocation Of Bursaries To Students In Public Secondary Schools In Central Division Of Machakos District In Machakos County (Doctoral dissertation, University of Nairobi).

Mutai, B. (2006). How to write quality research proposal: a complete and simplified recipe. . New York: Talley Publications.

National Research Council (2013). Education for life and work: Developing transferable knowledge and skills in the 21st century. National Academies Press.

Obiero, P. M. (2014). Effectiveness of Constituency Development Fund Bursary Scheme on Participation Rate in Public Secondary Schools in Rachuonyo North District Kenya.

Onkoba, B. (2012). Impact of bursary award on the internal efficiency of secondary schools in Gucha District, Kisii County, Kenya (Doctoral dissertation).

Orodho, J. A., Waweru, P. N., Ndichu, M., & Nthinguri, R. (2013). Basic education in Kenya: Focus on strategies applied to cope with school-based challenges inhibiting effective implementation of curriculum. International Journal of Education and Research, 1(11), 1-20.

Otieno, S. (2010). KCPE: The 'curse' of free education‖ in The East African Standard 30th December (2010). Nairobi: The Standard Media Group.

Oyaro, K. (2008). Education-Kenya: Students pour in, Teachers drain Away. Journal Paper, 25(7), 523-543.

Patrinos, H. A. (2013). Private education provision and public finance: the Netherlands. Education Economics, 21(4), 392-414.

Sagarik, D. (2014). Educational Expenditures in Thailand: development, trends, and distribution. Citizenship, Social and Economic Education, 13(1), 53-66.

Smith, D. G. (2015). Diversity's promise for higher education: Making it work. JHU Press.

Solga, H. (2008). Employment Opportunities for Low-Skilled Persons from a Sociological and Microeconomic Perspective. Skill Formation. Interdisciplinary and Cross-National Perspectives, 173-204.

Son, H. H. (2010). Human capital development. Asian Development Bank Economics Working Paper Series.

UNESCO. (2007). EFA Global Monitoring report (2008) Education for all by (2015). Will we make it?

UNESCO. (2008). EFA Global Monitoring Report 2009: Overcoming Inequality: Why Governance Matters. Paris: UNESCO.

Waswa, F., Kilalo, C., Mwasaru, D., & Kennedy, A. (2014). Sustainable Community Development: Dilemma of Options in Kenya. Springer.

Wilkins, S., & Stephens, B. M. (2013). Assessing student satisfaction in transnational higher education. International Journal of Educational Management, 27(2), 143-156.

Ziderman, A. (2013). Student loan schemes in practice: a global perspective. Student Financing of Higher Education: A Comparative Perspective, 32-60.